WASHINGTON STATE DEPARTMENT OF ECOLOGY

Vehicle Recycling Manual

A Guide for Vehicle Recyclers

The Key to a Better Environment

Department of Ecology
Hazardous Waste and Toxics Reduction Program
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Reduce Waste

printed on recycled paper

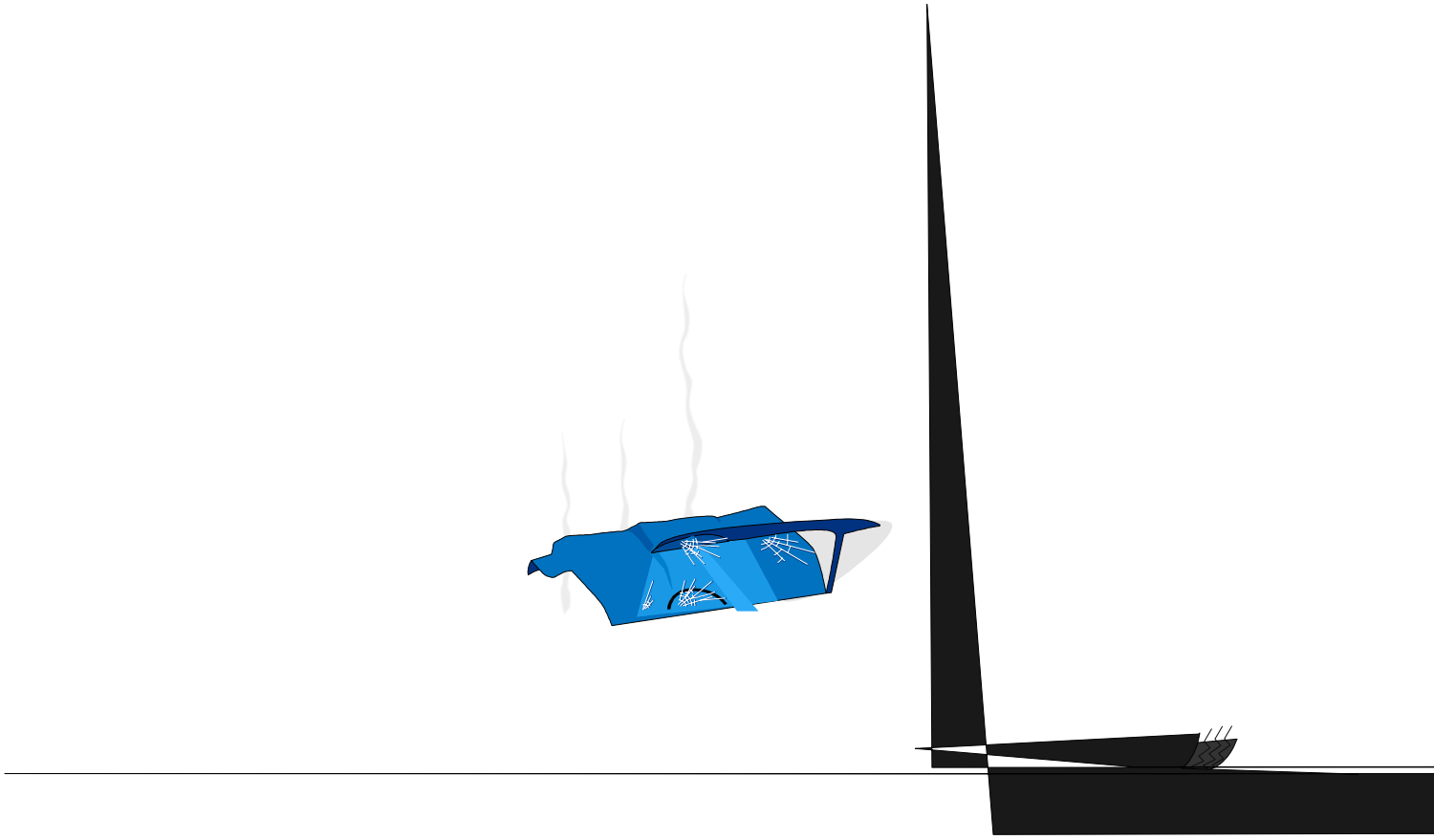
Introduction

Approximately 275 million tons of hazardous waste are generated each year in the United States. That is enough to fill the Louisiana Super Dome 7 times each year. That equates to about one ton of hazardous waste for every American man, woman, and child. Manufacturing even a simple product produces hazardous waste. For example, the manufacture of a tennis ball creates 50 different hazardous waste streams, stain resistant carpet creates 118 different waste streams, and a large car (fully loaded, of course) creates eight 55-gallon drums of hazardous waste during manufacturing! These wastes can pollute groundwater, rivers, lakes, aquifers, air, and the soil that we grow our food in and live on. It only takes one gallon of used oil to pollute one million gallons of drinking water.

Ever since vehicles were first manufactured in the early 1900s, they have been reused and recycled. The recycling system is heavily dependent on vehicle recyclers. When an automobile is no longer usable, it generally ends up in the hands of a recycler. The United States vehicle recycling and shredding industry is a multi-billion dollar a year business. *Vehicle recyclers play a valuable role* by rebuilding, recovering, and reselling usable parts from worn out or damaged vehicles, as well as recycling materials that cannot be used in their present form. They make it easy for consumers to find clean, used parts for all types of vehicles. Even though generation of wastes are some times unavoidable, vehicle recyclers improve the quality of our environment through good waste management practices.

Waste reduction and pollution prevention practices can benefit the vehicle recycling industry in many ways, including:

- A healthier, safer work environment for you and your employees generating possible dollar savings in medical insurance, fewer sick days, and increased production.
- Protection of yourself and others from serious injury or illnesses.
- Avoidance of long-term liability concerns. Remember, you are legally and financially responsible for the proper handling of your wastes.
- Maintaining the ability to get insurance or bank loans.
- Minimizing the chances of not being able to sell your property due to contamination problems.
- Substantial monetary savings on hazardous waste management costs.
- Avoiding costly waste transportation and disposal costs.
- Reducing regulatory requirements.
- Reducing operation costs by using less raw or new materials.
- Saving money when you buy and use only what you need.
- Thinking of everything as a product. Selling or exchanging surplus materials with other businesses may produce additional income for your business.
- Creating a great marketing and public relations tool. Tell everyone that your business is environmentally responsible!



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recycled annually.lAt least 95% of all cars scrapped in theUnited States are collected for reuseand recycling.lCars a
ited States.l75% of the material in a vehicle iscurrently recycled, as opposed to about61% of aluminum cans.lVehicle recycling

Waste Reduction - A Good Start

Waste is defined as any material you intend to discard. Waste is considered yours if your actions or business operations cause clean material to become contaminated and unusable for its intended, original purpose. If waste is on your property (even if someone else dumped it there or left it behind) you are responsible for it. The greatest economic and environmental benefits come from avoiding the generation of waste in the first place.

Material is considered a waste until recycling makes it usable again. Recycling is better than disposal, but is still less beneficial than waste reduction. These ideas should help to reduce waste, free up labor, and may provide you payback on investments.

To begin

- ✔ Take a walk through your business and look at all the processes that use chemicals or generate solid, liquid or air wastes.
- ✔ Do not let yourself get overwhelmed! Make small incremental changes.
- ✔ Ask yourself if there is a way you can change a process so that it does not produce a waste or if you can lower the toxicity of the products you use.

Substitute a less toxic raw material

- ✔ Switch to non-chlorinated compounds or a cabinet parts washer for parts cleaning.
- ✔ Always ask for a material safety data sheet before ordering any new product. ***Biodegradable*** does not necessarily mean environmentally safe, or that the product is exempt from regulations. Safe products that become mixed with hazardous substances may need to be handled as hazardous waste. Call Ecology for help if you are unsure.

Use good operating practices

- ✔ Do not let liquids evaporate; maintain equipment to prevent leaks and spills; monitor usage.
- ✔ Maintain equipment and use drip pans to minimize the use of any absorbents. If you must use absorbents, consider reusable or combustible materials.
- ✔ **LABEL** everything (including small spray bottles) to avoid cross contamination. This will facilitate recycling.
- ✔ Keep all chemicals in **closed, covered or sealed containers.**
- ✔ Always use funnels or pumps when transferring or dispensing chemicals.
- ✔ Place a platform or step next to storage drums so employees do not have to lift drain pans above their waists.
- ✔ Seal floor drains. Do not discharge processed waste water to the ground, dry wells or septic systems.

Recycle wastes and waste water which you cannot reduce.

- ✔ Consider putting dirty floor washing water into your spray cabinet instead of down the drain.

The following types of wastes may be produced by the vehicle recycling industry during dismantling or disassembly:

Possible Hazardous Wastes

- ⇨ Used Oil
- ⇨ Used Oil Burned in Space Heaters
- ⇨ Used Oil Filters
- ⇨ Transmission Fluid
- ⇨ Transmission Filters
- ⇨ Brake Fluid
- ⇨ Antifreeze
- ⇨ Refrigerant (CFCs)
- ⇨ Fuel and Fuel Filters
- ⇨ Lead-acid Batteries
- ⇨ Lead Parts
- ⇨ Mercury Switches
- ⇨ Waste Water
- ⇨ Sump Sludges
- ⇨ Air Emissions
- ⇨ Spray Cans
- ⇨ Windshield Washer Fluid
- ⇨ Air Bags
- ⇨ Auto Fluff
- ⇨ Shop Towels
- ⇨ Auto Body Shop Waste
- ⇨ Asbestos
- ⇨ Contaminated Soil

Non-hazardous Wastes

- ⇨ Dust
- ⇨ Tires
- ⇨ Plastics
- ⇨ Glass
- ⇨ Empty Containers

Used oils

Used oil is defined as any oil that has been refined from crude oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Do not accidentally contaminate your used oil with even small amounts of brake cleaner, carb cleaner, or other wastes. This could turn your used oil into hazardous wastes.

Used oils include but are not limited to the following:

Motor oil
Transmission fluid
Lubricating oil
Gear oil
Cutting oil
Hydraulic oil
Differential oil
Power-steering fluid
Transaxle fluid

- ✔ Store used oil in a leak-proof and closed container.
- ✔ Do not accidentally contaminate your used oil with even small amounts of brake cleaner, carb cleaner, or solvents. Even small amounts of chlorinated solvents turn recyclable used oil into dangerous waste. Purchase and use non-chlorinated aerosol solvents.
- ✔ Drain and collect all oils on a covered and curbed, impermeable concrete area away from any drains.
- ✔ Used oils can be mixed together and stored in the same container. However, check with your oil disposal company or Department of Ecology (Ecology) before mixing any wastes together in the same drum. In addition, burning mixed used oils of significantly different viscosities has been reported to cause oil heater feed lines to clog.
- ✔ Label properly. **"Used Oil Only"**
- ✔ Regularly check all used oil storage containers.
- ✔ Used oil may be recycled by: *Recovery and re-refining by an oil hauler or fuel marketer or, burning in an approved on-site heating unit or sent off site to be burned for energy recovery. Check with Ecology for requirements.*
- ✔ Do not mix antifreeze, solvents, gasoline, degreasers, paint or anything else with used oil.
- ✔ Do not mix brake fluid with used oil. Collect and dispose of separately.

Used Oil Burned in Space Heaters

Do not burn oil for disposal, this is illegal. Burn oil for heating only.

The kinds of used oils that may be burned in space heaters are:

1.) Any used oil from do-it-yourself oil changers who generate used oil as a household waste,
2.) On-specification oil from any source, (see criteria below)
3.) Off-specification used oil provided that the heater burns only used oil that the owner or operator generates, the heater is designed for a maximum capacity of not more than 0.5 million BTU per hour and the combustion gases from the heater are vented to the outside.

If your business burns used oil for energy recovery, check with your state or local air quality division to inquire about air quality requirements, and check with state building code personnel to inquire about building codes for the installation and use of the burner.

On-specification oil means the used oil meets the following specifications:

- Flash point 100 degrees Fahrenheit minimum
- Arsenic 5 parts per million (ppm) maximum
- Cadmium 2 ppm maximum
- Chromium 10 ppm maximum
- Lead 100 ppm maximum
- Total halogens 4000 ppm maximum
- PCB 2 ppm maximum

Off-specification oil is any oil that exceeds one of the maximum concentrations listed above.

Used Oil Filters

Used oil filters, except those from heavy trucks are exempted from state and federal hazardous waste requirements. Used oil filters should be punctured and drained for 24 hours, then crushed and kept in a separate container.

- ✔ Keep drained filters in a separate container marked "Used Oil Filters ONLY".
- ✔ Recycle used oil filters that have been drained and crushed.
- ✔ Put oil drained from filters into your "Used Oil Only" container.

Transmission Fluid

Transmission fluid is not regulated as a hazardous waste unless it is not recycled or it has been mixed or contaminated with hazardous wastes such as solvents, brake cleaner or carb cleaner.

- ✔ Do manage transmission fluids like you manage used oil.
- ✔ Do not dispose of transmission fluid in a storm drain, septic tank, dry well, sewer system or dumpster.

Transmission Filters

Transmission filters should be handled like used oil filters. This means that transmission filters are exempt from state hazardous waste requirements if they are recycled or properly disposed of in a landfill or hazardous waste facility.

- ✔ Remove fluid by draining for 24 hours.
- ✔ Keep drained filters in a container marked "Used Transmission Filters Only."
- ✔ Put oil drained from filters in your "Used Oil Only" container.
- ✔ Do not put undrained filters in the dumpster.

Brake Fluid

Shops occasionally deal with small amounts of brake fluid. Because brake fluid is not crude-based, it shouldn't be treated as used oil. Brake fluid itself is typically hazardous, due to toxicity. Brake fluid also becomes hazardous when it gets contaminated with chlorinated solvents from spray can brake cleaner.

- ✔ Collect brake fluid in a separate, marked, closed container.
- ✔ Look for a waste hauler that will recycle used brake fluid.
- ✔ Do not put brake fluid down any drain or on the ground.

Antifreeze

Antifreeze is commonly made up of ethylene glycol, propylene glycol, or another chemical that will transfer heat from a vehicle engine to its radiator. Antifreeze often becomes contaminated with traces of fuel, metal particles and grit. Some recent toxicity characteristic tests have shown lead, benzene, and other contaminants present at levels which make antifreeze a hazardous waste. Still bottoms, antifreeze filters or solids should also be handled as hazardous waste.

Flushing wastes are not considered the same as antifreeze and are not typically hazardous if generated through simple water rinsing with a hose. Reusable or recycled antifreeze can be used in facility vehicles, sold or given away. Fact sheets on antifreeze management are available by request from Ecology.

- ✔ Drain antifreeze from radiators and heater cores as soon as possible.
- ✔ Determine if the antifreeze is reusable or waste fluid.
- ✔ Store antifreeze in closed containers on an impermeable concrete surface with spill controls. Consider keeping antifreeze in two separate, closed containers: one for antifreeze that cannot be reused marked "**WASTE** ANTIFREEZE ONLY," and one marked "**USABLE** ANTIFREEZE ONLY."
- ✔ Recycle by reuse, distillation, filtration or ion exchange. Recycling can be done on-site or off-site by a antifreeze recycling service.
- ✔ Do not mix waste antifreeze with any other waste.
- ✔ Do not dispose of antifreeze down storm drains, in septic tanks, dry wells, sewer systems or on bare ground.

Refrigerant (CFCs)

One of the single largest users of refrigerant chlorofluorocarbons, or CFCs, is automotive air conditioning. It accounts for over 20% of all the CFCs used in this country. CFCs refer to the Freon, R-12 and R-134a used in air conditioning units. They are a family of chemicals that are stable, nonflammable and noncorrosive. If released into the air, CFCs drift into the upper atmosphere and destroy the ozone layer that protects the Earth from harmful ultraviolet radiation.

It is illegal to vent CFCs into the environment. This includes Freon, R-12 and R-134a that is being reclaimed or recycled. Spent CFCs not reclaimed or recycled and CFCs used as solvents ***are*** considered dangerous waste.

CFCs are processed by using one of these methods:

Recovery—removing refrigerant from air conditioning units and storing it in a container without testing or processing it **or**

Reclaiming—processing refrigerant, usually by distillation, until it meets resale specifications.

- ✔ Have certified technicians remove refrigerants from all vehicles using EPA approved recovery equipment.
- ✔ Verify that all vehicles entering the facility without refigerant have had the refrigerant removed using the proper methods.
- ✔ Store refrigerant in tanks that meet federal Department of Transportation (DOT) or Underwriters Laboratory (UL) standards.
- ✔ Sell refrigerant only to certified technicians or certified reclaiming facilities who will reclaim it to its original purity specifications.
- ✔ Reuse refrigerant only in vehicle air conditioning units owned by your facility.
- ✔ Dispose of filters from CFC recapture as hazardous waste.

Fuel and Fuel Filters

- ✔ Remove fuel tanks as soon as possible after the vehicle enters the facility.
- ✔ Determine if fuel is reusable or waste fuel.
- ✔ ***Label containers*** clearly. **"Reusable Fuel"** or **"Waste Fuel."**
- ✔ Store waste fuel in closed, leak-proof containers.
- ✔ Reusable fuel may be used in facility or employee vehicles.
- ✔ Do not mix fuel with any other waste streams.
- ✔ Drain excess fuel from filters into a proper fuel container.

- ✔ Accumulate used fuel filters in a separate, fireproof container marked **"Used Fuel Filters Only."**
- ✔ Fuel filters should be handled as hazardous waste and disposed of accordingly. Some landfills will take used fuel filters if they are punctured and drained for 24 hours. Check with your local landfill for information.

Lead-Acid Batteries

Spent lead-acid batteries contain lead and corrosive acids which are considered hazardous waste if they are not recycled or returned to a battery manufacturer.

- ✔ Test batteries to determine usability or resale quality.
- ✔ If spent, remove lead cable ends from batteries and store lead parts in a covered container that is strong enough to hold the weight of the lead.
- ✔ Leave lead battery cable ends attached to scrap batteries for recycling.
- ✔ Place cracked or leaking batteries in a closed leak-proof storage container or on a curbed, impermeable ***asphalt*** surface with spill controls. Battery acid can degrade concrete.
- ✔ Store batteries indoors. If stored outdoors, the area should be ***covered*** to keep rainwater from collecting and causing runoff. Protect batteries from freezing.

Lead Parts

Lead is a well known toxic substance. The amount of lead found in a single BB or shotgun pellet is enough to contaminate an entire truckload of auto fluff, making it hazardous waste and requiring costly disposal.

- ✔ Remove lead tire weights and battery cable ends before crushing vehicles. Battery cable ends may be left on usable batteries and recycled along with the batteries.
- ✔ Remove other known sources of lead from vehicles when practical.
- ✔ Store lead parts in a covered container that is strong enough to hold the weight of the lead.
- ✔ Recycle lead parts with a metals or battery recycler.

Mercury Switches

Mercury is a highly toxic metal often found in the hood or trunk light switches of older vehicles. Once released into the environment, mercury cannot be eliminated.

- ✔ Remove all mercury switches from the vehicle as soon as possible.
- ✔ Be careful not to break or puncture the mercury container during removal.
- ✔ Store mercury switches in a leak-proof, closed container. Store in a way that will prevent the capsules from breaking.
- ✔ Recycle mercury switches with a licensed metals recycler that reclaims mercury.

Wastewater Management

Wastewater is water that has been used for a purpose such as engine cleaning and will be disposed of. All process wastewater should go to a sanitary sewer and not to any other type of drain. Check with your local sewage plant for information on discharge limits and to obtain a discharge permit if required or to find out where your drains lead. Fact sheets are available from Ecology for more information: "Floor Drains and Generator Liability," "Process Waste Water Disposal Associated with Vehicle Maintenance," "So, You Have This Floor Sump...," "Wastewater Discharge Permits in Washington State" and "Water Quality in Washington State."

- ✔ Use either an on-site capture and reuse system for wastewater or have a connection to a city sewer and wastewater treatment facility with the proper permitting.
- ✔ Floor cleaning waste water may be contaminated with heavy metals and grease that need to be treated before discharging to the sewer. If not contaminated, the water may go to an oil/water separator (or other type of appropriate system) and then the sanitary sewer.
- ✔ Recycle floor mop water into cabinet washers.
- ✔ Steam cleaning, pressure washing and spray cabinet wastewater should go to an oil/water separator (or other type of appropriate system) and then the sanitary sewer.

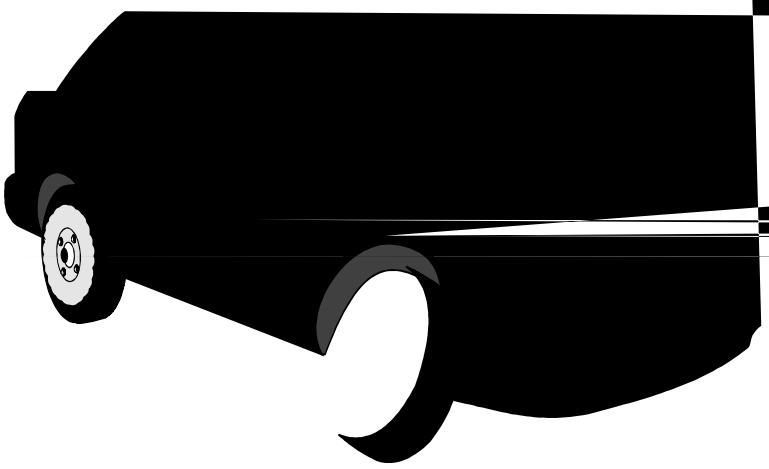
Wastewater Management (cont

- ✔ Recirculate and reuse water until unusable.
- ✔ Evaporate cabinet washer water to reduce its volume.
- ✔ Keep floors clean to begin with. Catc leaks before they hit the floor.

Sump Sludges

Sludges from your sump or oil/wate separator may be hazardous waste. You will need to test sludge at a professional laboratory to determine if it is hazardous, or save testing costs and assume the wast is hazardous and manage it accordingly.

- ✔ If sludge tests as a hazardous waste, send it to a hazardous waste management facility.
- ✔ Do not put hazardous sludge in the dumpster or on the ground.
- ✔ Do not use a septic tank pumping service to remove this sludge. There is no legal, environmentally safe way for these services to dispose of the waste it is hazardous.



used for this purpose.

- ✔ Lower speed limits on roads.
- ✔ Cover piles to protect from wind.

Ecology has a very informative Focus sheet entitled "Techniques for Dust Prevention and Suppression." Call today and

Shop Towels

- ✔ Try not to use disposable towels. Cloth towels can be cleaned and reused.
- ✔ When possible use non-chlorinated cleaning compounds.
- ✔ Do not throw dirty towels into the dumpster. Use an industrial laundry service.
- ✔ Do not saturate towels. If you do, wring them out and reuse the liquid.
- ✔ Keep waste shop towels in a closed, fireproof container labeled **"Used shop towels only".**

Auto Body Shop Wastes

If your vehicle recycling facility also does auto body work, you need to consider those waste streams associated with body work and painting. Contact Ecology for a copy of "A Guide for Autobody Shops."

Plastics

Recycling of plastics saves 90% of the energy over its primary production energy use. Unfortunately, plastics are made of many different materials which are not compatible with each other and cannot be recycled to high value products as mixed plastics. For successful recycling, materials must be separated in their pure form. To date, there is no real market for plastics recovered from used automobiles. Industry is trying to incorporate recyclability at the design stage thereby creating eventual markets.

- ✔ Check with your local recycling firm for plastic recycling options.

Glass

Automotive windshield glass is typically manufactured with two layers of glass and a sheet of PVC membrane in between. Because of this layering, recycling options for automotive windshield glass are limited. In addition, automotive glass has a different chemical composition from container glass. Automotive glass can be recycled into construction aggregate or other secondary markets if the PVC film can be completely removed. For more information, call the Clean Air Washington Center at 206-389-2808.

Asbestos

Under the Toxic Substances Control Act (TSCA) asbestos, if airborne, has been declared hazardous to human health. Brake shoes and clutches are not typically removed for reuse in vehicle recycling and are crushed with the vehicle. This may pose a significant problem at the shredder site where fine asbestos particles become airborne. Human health may also be impacted during their transportation to the landfill.

If you do remove brake shoes and clutches at your business, you have the potential to be exposed to asbestos dust. When these parts are removed from a vehicle, some dust can generally be seen. There are also many very small dust particles that cannot be seen with the naked eye.

These invisible particles may be asbestos or other brake lining material. Asbestos is only one of many materials used in brake linings today.

Until the use of asbestos products is phased out, the best way of limiting exposure and health damage to workers is to use proper controls, containing brake dust and preventing its release in the air.

- ✔ Do not clean brakes or clutches with air hoses, dry brushes, wet brushes, rags, garden hose, liquid squirt bottles, solvent spray or ordinary shop vacs.
- ✔ If you clean brakes or clutch assemblies, do use a special "HEPA" filter vacuum cleaner.
- ✔ If you remove brake shoes or clutches, using specially designed low pressure spray equipment that wets down brake or clutch dust and properly catches the run-off, this may prevent some asbestos from being released in the garage.
- ✔ Dispose of asbestos waste according to Federal and local regulations. Call your nearest regional Ecology Air Program office for further information.
- ✔ Asbestos waste should be placed in a heavy plastic bag, double tied, and stored in a leak proof, airtight container designated for asbestos waste.
- ✔ Do not eat, smoke or drink in asbestos work areas.
- ✔ Wash thoroughly before eating or going home.

- ✔ Change into clean clothes before going home. Do not take work clothing home. Asbestos particles can become embedded in clothing and carried home.

Contaminated Soil

At some facilities, soil has become contaminated by past or ongoing vehicle handling practices. The severity of the contamination will depend on such factors as the toxicity of the pollutant, total cumulative fluid loss to the ground and spill cleanup procedures.

- ✔ Prevent spills before they happen.
- ✔ If a spill does occur, assess the potential for ground water contamination.
- ✔ Collect the soil in appropriate containers and store the containers on a covered, impermeable containment area until it can be cleaned or transported to a waste treatment facility.
- ✔ Cover any remaining contaminated soil with a plastic cover to prevent contact with rainwater.
- ✔ Divert stormwater around the covered contaminated soil to prevent contamination of the stormwater.

Empty Containers

An empty container is one that has had all contents removed by normal practical means, such as inverting and draining, shaking, scraping or scooping. After all these methods have been utilized, the container is considered empty when:

- ✔ No more than 1 inch or 3% of the container volume remains for small containers less than 110 gallons.
- ✔ No more than 0.3% of the container volume remains for containers greater than 110 gallons.
- ✔ Compressed gas pressure inside the container is equal, or nearly equal to atmospheric pressure.
- ✔ Store empty containers in an area protected from the weather.
- ✔ Make sure all containers are covered, bungs are tightly in place, all labels are removed and the container is marked "EMPTY." Include the name of the last product stored in the container and the date it was emptied.
- ✔ If you are not going to reuse the empty containers on-site, recycle them if possible.

Containers of acutely hazardous waste, toxic extremely hazardous waste or pesticides marked with danger or warning labels, must be ***rinsed at least 3 times*** with water or solvent, depending on the original contents. *Reuse or properly dispose of the rinse water.*

Refer to Ecology Fact Sheet #96-431 "Safe Handling of Empty Containers."

Material Safety Data Sheets (MSDSs)

A material safety data sheet should come with each of the chemical products you purchase from a manufacturer or vendor. They are used to relay chemical hazard information. As a business, you are required to keep MSDSs for all products available to employees. The ability to scan through an MSDS and pick out the following information is important. MSDSs are valuable because they describe:

- ✔ the physical and chemical properties of the hazardous substances contained in the product
- ✔ spill cleanup instructions
- ✔ health hazards and appropriate first aid
- ✔ fire and explosion hazards
- ✔ proper management and disposal practices

An MSDS file should be maintained at the workplace. It should be located so that all employees have easy access. If you keep MSDSs on file in a computer, a hard copy should also be available in the event of a computer failure or loss of electrical power.

Indicate to your employees how and where your MSDSs are to be located and any access procedures necessary. Assign someone the responsibility to obtain, maintain and update MSDS information.

Testing

Sometimes sending a sample of waste to a laboratory for analysis is the only way to determine if the waste is hazardous. Important tests for vehicle recyclers may include pH, volatile organics, total petroleum hydrocarbons and heavy metals. If you test a waste once, and continue to use the same industrial process, you may apply those test results when designating future batches of the same waste. If you need to test, request Ecology's Hazardous Waste Services Directory for help in locating a laboratory.

Solvents for Cleaning Parts

Here are some low tech ideas for reducing ***solvent-based parts washing waste:***

Equipment Management

- ✔ Switch to a recirculating spray cabinet for cleaning parts instead of using solvent.
- ✔ Negotiate your *service contracts* so that solvent change outs fit your use schedule, especially if you have seasonal fluctuations.
- ✔ *Segregate cleaning* into two stages, each having a dedicated washing unit. Two units extend the usefulness of the solvent.
- ✔ Use parts washers equipped with filters and other separation and treatment options that will *keep the solvent cleaner* longer. Add-on accessories are available.
- ✔ Consider an on-site distillation unit to recycle spent solvent.

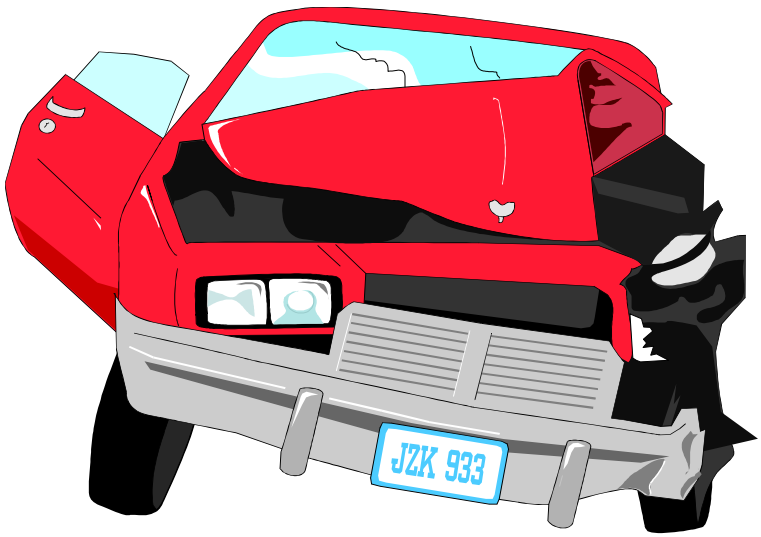
Equipment Operation

- ✔ Think about when parts *need* cleaning and when they do not. Each use of a parts washing unit increases contamination of the cleaner and shortens the cleaner's useful life. If only interior surfaces need to be cleaned, avoid cleaning the exterior. Remove caked on grease and oil from parts with a scraper or knife before washing to reduce cleaning time and water used.
- ✔ *Clean carefully* (no splashing or dragging) and use drain racks to save solvent and clean up labor.
- ✔ Cover and turn off circulating sinks to *prevent evaporation*.
- ✔ Appearance is not always a good indicator of the solvent's ability to clean. *Monitoring* change out schedules and filtering helps to extend the useful life of the cleaner.

Inventory Management

- ✔ Limit access to *supplies* to prevent waste. Use a computer to track parts and wastes. Do not over order supplies. Use only what you need.
- ✔ Consider the *convenience* of using a central cleaning station. Weigh individual stations against their potential for accidents and exposure, and waste generation versus convenience and efficiency.

These low tech, low cost ideas can be applied to other vehicle recycling processes as well.



Waste Handling, Storage and Disposal Practices

It is recommended that waste streams not be mixed. Mixing means fewer recycling opportunities or reuse options and more expensive management costs. Mixing wastes might even cause a chemical reaction that could produce an explosion or toxic gases. Also, please remember - **Label, Label, Label!**

A Quick Look at the Waste Streams

Waste	Best Handling Method
Air bag cartridges	Sell, dispose of properly.
Antifreeze	Reuse, recycle on-site or off-site.
Batteries	Recycle; avoid storing for more than 6 months.
Brake fluid	Collect in a separate container, and dispose through a hazardous waste company.
Empty containers	Reuse on-site after all free product has been removed and the container cleaned. Recycle larger metal containers such as drums. Check with local solid waste landfill to see if they accept empty containers.
Freon (CFC)	Recover using certified recycling equipment and recycle on-site or send off-site.

Best Management Practices for Vehicle Recyclers

When working with any kind of vehicle fluids, please consider the following to help reduce waste streams and keep hazardous substances out of building drains, sumps and off the bare ground.

If you:	Please consider that:	Best management practice:
Wash engines or parts	The resulting wastewater is likely to be hazardous from greases, oils and solvents.	Only wash engines and parts if absolutely necessary. Keep wastewater separate and evaluate it.
Use aerosol solvents or other degreasers	These chemicals can compound waste problems by contaminating washwater, sludge, or bare ground with hazardous materials.	Put parts to be cleaned on a drip pan - not the floor. Use a filtered parts washer to clean engine parts and manage the solvent in the washer as a hazardous waste. Use aerosols that do not designate as hazardous waste.
Drain vehicle fluids (oil, brake fluid, antifreeze, etc.)	These chemicals can compound waste problems by contaminating washwater, sludge, or bare ground with hazardous materials.	Use drip pans under vehicles to collect fluids. Recycle used oils and other fluids. Drain radiators before flushing and recycle waste antifreeze.
Clean shop floors	Hosing the floors down with water or solvent can flush contaminants into the floor drains, contaminating sludges in the system or possibly causing runoff to the bare ground outside.	Keep floors clean to avoid the need to wash. Use dry sweeping compounds. Reuse sweeping compounds as long as they remain absorbent. Use dead-end sump to catch and hold washwater if necessary.
Store solvents	Spilled or leaked solvents and their vapors are dangerous and can contaminate bare ground or wastes in the plumbing system.	Keep containers closed at all times when not in use. Store solvents in a flammables cabinet. Do not use solvents near drains.
Store waste vehicle fluids in a room with a floor drain	Many materials used in vehicles can be dangerous and can contaminate wastes in the plumbing system.	Keep waste containers in a separate, covered storage area with no floor drain. Install a curb, berm or good secondary containment system to contain any wastes that may leak from storage containers. Inspect containers for leaks on a weekly basis.
Accidentally spilled material	Many materials used in vehicles can be dangerous and can contaminate bare ground or wastes in the plumbing system.	Clean up spills immediately. Notify the State Emergency Management Division at 1-800-258-5990 or your Ecology regional office if appropriate. Have the materials needed for spill cleanup on hand and train all employees how to properly use them.

Identifying wastes:

A **hazardous waste** is a solid, liquid or gaseous material with certain properties that could cause injury or death to a person, or could damage and pollute land, air, surface water or groundwater. Some wastes are specifically **listed** in the *Dangerous Waste Regulations* as hazardous. Others wastes may be regulated because they exhibit certain **characteristics** (ignitability, corrosivity, reactivity, toxicity) or because they are waste mixtures which meet the **criteria** of toxicity or persistence.

Major Category	Hazardous Waste Type	Vehicle Recycler Examples
Listed Wastes	***Discarded Chemical Products*** are unused, discarded, pure substances that have only one active ingredient.	Pesticides Unrinsed containers (Discarded chemicals may not be generated by vehicle recyclers)
	Dangerous Waste Sources are hazardous wastes from specific industry sources such as plating, and generic activities (such as degreasing) and are listed in the Dangerous Waste Sources List.	Chlorinated Solvents Contaminated Oil
Characteristic Wastes	***Ignitable*** waste is capable of causing a fire. Has a flash point of less than 140 degrees Fahrenheit.	Spent solvents Solvent still bottoms
	Corrosive material is so strong it can dissolve metals and burn skin and eyes. Has a pH of 2 or less or 12.5 or greater.	Acid from lead-acid batteries Acids/Bases
	Reactive material will become unstable (burn, explode, give off vapors) if mixed with air, water, heat or other materials.	Not typically generated by vehicle recyclers
	Toxicity Characteristics (TCLP) material is toxic if the waste is tested by a qualified lab using the Toxicity Characteristic Leaching Procedure (TCLP) and generates a positive result.	Spray cabinet wash water (possible) Sludges Heavy metals
Criteria Wastes	***Toxic*** wastes contain chemical constituents that are toxic to fish and other animals.	Waste antifreeze Oil and transmission fluid Brake fluid (possible)
	Persistent wastes can be any chemicals that start with chloro, fluoro, or bromo. Please refer to the list in the Dangerous Waste Regulations.	Solvents with the word “chlor” as part of the main ingredients Used oil Metal cutting oil Methylene chloride

Determining Generator Status

If you generate:	Then your size is:
220 pounds or less per month (less than 1/2 of a 55 gallon drum) of hazardous waste or less than 2.2 pounds of acutely hazardous waste*	SQG (Conditionally Exempt Small Quantity Generator)
More than 220 pounds but less than 2200 pounds per month (about 1/2 to 4 drums) of hazardous waste	MQG (Medium Quantity Generator)
2200 pounds or more per month (about 4 drums or more) of hazardous waste or 2.2 pounds of acutely hazardous waste	LQG (Large Quantity Generator)

Small Quantity Generator (SQG):

1. Identify hazardous wastes and keep track of how much you generate or accumulate each month.
2. Manage your waste in a way that does not pose a threat to human health or the environment.
3. Ensure that your wastes are treated, recycled, reused, or disposed of properly.
4. If you have a generator RCRA Identification Number, remember to file your annual Dangerous Waste Report with Ecology by March 1 of each year.

Regulated Generator (MQG or LQG):

1. ***Identify*** your hazardous wastes.
2. ***Obtain*** a RCRA Identification Number.
3. ***File*** your annual Dangerous Waste Report with Ecology by March 1 of each year.
4. ***Perform preventative maintenance*** - maintain an alarm system for emergencies, have a spill clean up plan, have fire control equipment and clean up equipment on hand, maintain all emergency equipment, inspect and maintain containers, have a fire inspection once per year.
5. ***Properly accumulate*** hazardous waste - make sure your secondary containment is capable of holding all leaks.
6. ***Plan for emergencies*** - have an emergency coordinator, post emergency information, report spills and train employees. LQGs have a *written* training plan and a *written* contingency plan.
7. ***Use proper containers*** and manage them correctly - store ignitable waste using approved containers, keep incompatible wastes separated, use leak proof and covered containers, inspect containers weekly, maintain 30" of aisle space between container rows and label.
8. ***Arrange for proper transportation and disposal:***
   LQGs must transport and dispose of hazardous wastes within 90 days of the start date noted on the container accumulation label.
   MQGs must transport and dispose of hazardous wastes within 180 days of the start date noted on the container accumulation label.
   SQGs have no time limit past the start date noted on the container accumulation label. Accumulation time limits start when waste is first generated.
9. ***Manifest*** shipments of hazardous waste.
10. ***Keep records*** of hazardous waste activities - keep results of laboratory tests, keep copies of annual reports, manifests, and all records for at least 5 years.

*Extremely Hazardous waste and Acute Hazardous waste pose a greater threat to the environment and human health than Dangerous waste. Extremely Hazardous waste is restricted from land disposal and may have a Quantity Exclusion Limit (QEL) of 2.2 pounds instead of 220 pounds. Acute Hazardous waste also has a 2.2 pound QEL. Most businesses generate Dangerous waste and not Extremely Hazardous waste, but pesticide applicators and generators discarding products with poison labels should pay special attention to this category.

Plan For Emergencies

- **Designate an emergency coordinator**
  - ✔ at all times there should be at least one employee on the premises or on call, who is responsible for coordinating all emergency response measures. It is also a good idea to have at least one back-up emergency coordinator.
- **Make sure the emergency coordinator is familiar with the:**
  - ✔ operations and activities at your site.
  - ✔ location and hazardous properties of all the wastes that you handle.
  - ✔ location of all records.
  - ✔ layout of your facility (inside and outside).
  - ✔ agreements you have made with state or local authorities and outside emergency response contractors for their assistance.
- **Prepare and post near all phones and intercoms an emergency directory containing:**
  - ✔ the name and telephone number of the emergency coordinator and his or her backups,
  - ✔ a description and the location of emergency equipment, such as fire extinguishers, spill control materials and alarm system, and
  - ✔ the telephone number of the fire department, unless you have a direct alarm.
- **Educate your employees on the proper waste handling and emergency procedures that are relevant to their job responsibilities.**
- **If you generate per month, or accumulate at any time, more than 2,200 pounds of hazardous waste, or 2.2 pounds of certain pesticides or poisons, you must also comply with the following *training* requirements, prepare a *written contingency plan* and develop *emergency procedures* as outlined below:**

Additional Training Requirements for Generators of 2,200 Pounds or More: **Include the following topics in your training program:**

- ✔ The capabilities and proper use of emergency equipment including communication and alarm systems.
- ✔ How to respond to fires, explosions, spills, releases to air, and groundwater contamination incidents .
- ✔ Procedures for using, inspecting, repairing and replacing your emergency and any monitoring equipment.
- ✔ The details of any automatic waste feed cut-off systems**.** Steps for the shut-down of operations.

Provide annual refresher training for employees. Prepare and follow a written training plan which includes:

- ✔ A listing of the job title, job description and name of the employee in each position that handles or relates to hazardous waste management in your business .
- ✔ A written description of the type and amount of both introductory and refresher training you require for each position.
- ✔ Records documenting that your employees have received and completed required training.

Written Contingency Plans

Your written contingency plan should include the following:

- ✔ A description of

Required Emergency Procedures

For Generators of less that 2,200 pounds per month	For Generators of 2,200 pounds or more per month
During an emergency, the Emergency Coordinator must: ● In the event of a fire, call the fire department or attempt to extinguish the fire. ● In the event of a spill, contain the flow of the spill as much as possible, cleanup the waste and any contaminated material, and call the nearest Ecology regional office. ● If a fire, explosion or other release could threaten human health outside your business or reach streams, lakes or groundwater, call the nearest Ecology regional office and the National Response Center (1-800-424-8802) with the following information: 1. Your name, address and RCRA Identification Number. 2. Date, time and type of incident. 3. Amount and type of hazardous waste involved in the incident. 4. Extent of any injuries. 5. Estimate the amount of recovered materials and how you have managed these wastes.	During an emergency, the Emergency Coordinator must: ● Activate internal alarms to notify employees. ● Call state or local agencies if their help is needed. ● Identify the released material's character (is it flammable?), exact source, amount and the area it covers. ● Assess the possible hazards to human health and the environment. ● Call local authorities if evacuation of local areas may be advisable. ● Call the nearest Ecology regional office and the National Response Center (1-800-424-8802) and give them the following information: 1. Name and telephone number of the caller. 2. Name and address of the business or organization. 3. Time and type of hazardous waste incident. 4. Name and amount of the material involved. 5. Extent of any injuries. 6. Possible hazards to human health or the environment beyond your property. ● Take steps to control the incident such as stop ping equipment, removing or isolating containers and collecting any released material. ● If appropriate, monitor leaks, pressure buildup, gas generation or ruptures while you're handling the incident. ● **Immediately after the emergency:** ✔ Properly manage the recovered waste and contaminated materials (soil, water, rags, clothing). ✔ Make sure that emergency equipment is cleaned and fit for the next use. ● Call the nearest Ecology regional office and appropriate local authorities before resuming operations in the affected area of your business.

** Make sure that you are not generating any more hazardous waste than you absolutely must. Businesses that generate less than 220 pounds per month do not have to comply with the emergency planning requirements listed here (although it is a very good idea to utilize these safety practices anyway).*

Spills

Be Prepared — Spill Control

Spill Control Equipment

- ✔ Fire extinguishers are required in all vehicle recycling buildings. They should also be kept where any cutting torches are used and in yard vehicles.
- ✔ Safety equipment for employees should include rubber or latex gloves and safety glasses.
- ✔ Industrial spill clean-up products or absorbent material for soaking up oils and solvents such as rags, towels, pads, booms and organic absorbents (peat, corn cobs, cellulose fiber, sawdust, wood chips, rice and cotton seed hulls, granular clay, and lime for battery acid).
- ✔ Brooms, shovels and dust pans to pick up clean-up materials.
- ✔ Containers to hold spill waste: drip pans, pails, drums.

Spill Prevention

- ✔ Confine inspection, draining and dismantling of vehicles to one area.
- ✔ Drain vehicles, parts, and cores as soon as possible after vehicles come in.
- ✔ Dismantle vehicles, parts and cores on a curbed, impermeable, concrete surface with drip pans and absorbent materials.
- ✔ Plug all hoses after draining.
- ✔ Place all fluids in proper storage containers immediately after draining.
- ✔ Store vehicles, parts and cores with proper spill containment.
- ✔ Secondary spill containment efforts must be large enough to contain the maximum volume of fluid that could be spilled from the largest container in the area.
- ✔ Clean up small spills right away. Use the smallest amount of absorbent possible or drain into a sump or oil/water separator.
- ✔ Dispose of used absorbents properly - launder, burn for energy recovery, or test and properly manage either as solid or hazardous waste (per the test results). Store all used absorbents in closed, covered leak-proof containers.
- ✔ Store all waste fluids in closed containers to prevent spills. Close tightly to prevent evaporation, and check levels daily.
- ✔ Inspect containers regularly for leaks.
- ✔ Develop a maintenance plan for all facility equipment, such as crushers, forklifts and hydraulic lifts. Keep them well maintained, free of leaks and problems.
- ✔ Clean crusher regularly by wiping off accumulated grease and oil - this prevents runoff.
- ✔ Do not crush vehicles on unprotected ground.

Spill Clean Up

- ✔ Clean up spills right away.
- ✔ Report petroleum and fuel spills of 5 or more gallons, and any other chemical spill (including lead-acid batteries) to the nearest Ecology Regional Office.
- ✔ Organic absorbents that contain hazardous wastes cannot be recycled or burned on site.
- ✔ Keep spill control equipment/absorbent materials in a central location, accessible to all employees.
- ✔ Train all employees to quickly respond to different kinds of spills.

Spills and Leaks Reporting

To Report a Spill or Leak Call:

1-800-258-5990 State Emergency Management Division 24-Hour Spill Number

Report:	**Reportable Quantity:**
Uncontained spills of toxic, flammable, corrosive, and otherwise dangerous	Determine whether human health or the environment are threatened. Clean up the spill if you are equipped to

Hazardous Waste Disposal

The following is a partial list of Hazardous Waste Disposal and Recycling Companies. These are examples, not recommendations. For additional companies see Ecology's **Hazardous Waste Services Directory**, the **Environmental Services Directory**, your county's Hazardous Waste Disposal Guide, or your local phonebook.

ANTIFREEZE RECYCLING: (equipment and/or services)

Big Sky Industrial
9711 W. Euclid Road
Spokane, WA 99204
Phone: (509) 624-4949
FAX#: (509) 624-0099

CleanCare (Spokane)
1815 S. Lewis
Spokane, WA 99212
Phone: (509) 456-6860

Envirotech Systems, Inc.
18820 Aurora Ave. N. #201
Seattle, WA 98133
Phone: (206) 363-9000
FAX#: (206) 546-1920
Toll Free: 1-800-922-9395

Van Waters and Rogers, Inc.
PO Box 3541
Terminal Annex
Seattle, WA 98124
Phone: (206) 872-5000
FAX#: (206) 872-5041

Safety Kleen (Spokane)
E. 9516 Montgomery
Spokane, WA 99206
Phone: (509) 928-8353

or

Philip Environmental
955 Powell Ave SW
Renton, WA 98005
Phone: (425) 227-0311
FAX#: (425) 227-6191
http://www.cnw.com or philipenv.com

CleanCare (Federal Way)
P.O. Box 4100
Federal Way, WA 98063
Toll Free: (800) 282-8128
FAX#: (253) 383-8724

Safety Kleen (Lynnwood)
6303-212th St. SW
Lynnwood, WA 98036
Phone: (425) 775-7030

Van Waters and Rogers, Inc.
E. 4515 Wisconsin
Spokane, WA 99220
Phone: (509) 534-0405

BATTERY RECYCLING:

Allied Battery Co., Inc.
1031-6th Ave. S
Seattle, WA 98114
Phone: (206) 624-4141
FAX#: (206) 624-1573

Interstate Batteries
727-134th St. SW
Everett, WA 98204
Phone: (425) 743-7677
FAX#: (425) 742-1739

Interstate Battery System of Yakima
1325B S. 1st. Street
Yakima, WA 98901
Phone: (509) 457-3640

Interstate BatterySystem of Spokane
E. 6110 Broadway
Spokane, WA 99212
Phone: (509) 534-0676

Interstate Batteries
3480 Martin Way
Olympia, WA 98506
Phone: (360) 438-2747

Standard Batteries of Spokane
N. 601 Napa
Spokane, WA 99202
Phone: (509) 534-7879

OIL AND OIL FILTER RECYCLING AND DISPOSAL:

Philip Environmental Inc.
1100 Oaksdale Ave.
Renton, WA 98055
Phone: (425) 227-0311
FAX#: (425) 227-6187
http://www.cnw.com or philipenv.com

or

Philip Environmental Inc.
PO Box 229
Washougal, WA 98671
Phone: (360) 835-8743
FAX#: (360) 835-8872

C. Frost Company, Inc.
13649 NE 126th Pl, Suite 202
Kirkland, WA 98034
Phone: (206) 820-1900

CleanCare Corp.
P.O. Box 4100
Federal Way, WA 98063
Phone: (253) 627-3925
FAX#: (253) 383-8724
Toll Free: 1-800-282-8128

Big Sky Industrial
9711 W. Euclid Road
Spokane, WA 99204
Phone: (509) 624-4949
FAX#: (509) 624-0099

First Recovery
PO Box 875
Enumclaw, WA 98022
Toll Free: 1-800-545-3520
FAX#: (206) 813-5663

Safety Kleen Corp.
E. 9516 Montgomery
Spokane, WA 99206
Phone: (509) 928-8353

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421
Phone: (253) 926-0717

Safety Kleen Corp.
6303-212th St. SW
Lynnwood, WA 98036
Phone: (425) 775-7030

CleanCare Corp.
1815 S. Lewis
Spokane, WA 99212
Phone: (509) 456-6860

REFRIGERANTS (recycling, recovery, and reclamation equipment and services)

B.R. Engelking Co., Inc.
ACR Training
23024 Brier Rd.
Brier, WA 98036
Phone: (206) 778-2510

Philip Environmental
PO Box 229
Washougal, WA 98671
Phone: (360) 835-8743
FAX#: (360) 835-8872

C. Frost Company, Inc.
13649 NE 126th Place
Kirkland, WA 98034
Phone: (206) 820-1900

I.M./Thrifty Distribution
PO Box 301337
Portland, OR 97220
Toll Free: 1-800-747-0824

Johnson Controls Inc.
3003 Northup Way
Bellevue, WA 98004
Phone: (206) 827-7810

Total Reclaim, Inc.
PO Box 24996
Seattle, WA 98124
Phone: (206) 343-7443
FAX#: (206) 343-7445

Roar Tech, Inc.
N. 522 Fiske St.
Spokane, WA 99202
Phone: (509) 535-6757
FAX#: (509) 534-6759
Toll Free: 1-800-535-6757

Safety & Supply Co.
5510 E. Marginal Way S.
Seattle, WA 98134
Phone: (206) 762-8500
FAX#: (206) 762-2939

TRANSPORTATION (HAZARDOUS WASTE): (Hazardous waste transporters providing Uniform Hazardous Waste Manifest assistance)

Big Sky Industrial
9711 W. Euclid Road
Spokane, WA 99204
Phone: (509) 624-4949
FAX#: (509) 624-0099

Chem-Safe Services
PO Box 616
Kittitas, WA 98934
Phone: (509) 968-3973
FAX#: (509) 968-4680

Philip Environmental
955 Powell Ave SW
Renton, WA 98005
Phone: (425) 227-0311
FAX#: (425) 227-6191
http://www.cnw.com or philipenv.com

or

Philip Environmental
PO Box 229
Washougal, WA 98671
Phone: (360) 835-8743
FAX#: (360) 835-8872

CleanCare Corp.
P.O. Box 4100
Federal Way, WA 98093
Toll Free: (800) 282-8128

or

CleanCare Corp.
1815 S. Lewis
Spokane, WA 99212
Phone: (509) 456-6860
FAX#: (253) 383-8724

Roar Tech, Inc.
N 522 Fiske St.
Spokane, WA 99202
Phone: (509) 535-6757
FAX#: (509) 534-6759
Toll Free: 1-800-535-6757

Envirotech Systems, Inc.
18820 Aurora Ave N.
Suite 201
Seattle, WA 98133
Phone: (206) 363-9000
FAX#: (206) 546-1920

Van Waters and Rogers, Inc.
PO Box 3541
Terminal Annex
Seattle, WA 98124
Phone: (206) 872-5000
FAX#: (206) 872-5041

or

Van Waters and Rogers, Inc.
E. 4515 Wisconsin
Spokane, WA 99220
Phone: (509) 534-0405

Safety Kleen Corp.
6303- 212th St. SW
Lynnwood, WA 98036
Phone: (425) 775-7030

Airo Environmental Services, Inc.
4110 E. 11th
Tacoma, WA
Toll Free: 1-800-666-2476

WASTE OILS: (services or contracting)

CleanCare Corp.
PO Box 940
Tacoma, WA 98401
Phone: (253) 627-3925
Toll Free: 1-800-282-8128

Big Sky Industrial
9711 W. Euclid Road
Spokane, WA 99204
Phone: (509) 624-4949
FAX#: (509) 624-0099

NW Recycling Services, Inc.
PO Box 1049
Veradale, WA 99037
Phone: (509) 921-6821

Philip Environmental
955 Powell Ave. SW
Renton, WA 98055
Toll Free: 1-800-228-7872

Van Waters and Rogers, Inc.
PO Box 3541
Terminal Annex
Seattle, WA 98124
Phone: (206) 872-5000
FAX#: (206) 872-5041

Spencer Environmental
PO Box 1321
Sumner, WA
Toll Free: 1-800-286-0896
FAX#: (253) 863-3490

Roar Tech, Inc.
N. 522 Fiske St.
Spokane, WA 99202
Phone: (509) 535-6757
FAX#: (509) 534-6759
Toll Free: 1-800-535-6757

Safety Kleen
E. 9516 Montgomery
Spokane, WA 99206
Phone: (509) 928-8353

Envirotech Systems Inc.
18820 Aurora Ave N #201
Seattle, WA 98133
Toll Free: 1-800-922-9395

CleanCare Corp.
1815 S. Lewis
Spokane, WA 99212
Phone: (509) 456-6860

or

Van Waters and Rogers, Inc.
E. 4515 Wisconsin
Spokane, WA 99220
Phone: (509) 534-0405

Harbor Oil
11535 N Force Ave.
98390 Portland, OR 97217
Phone: (503) 285-4648 - Portland
(509) 926-4255 - Spokane
(509) 544-088 - Tri-Cities

SELECTED INTERNET SITES AND HOTLINES

Batelle List of Environmental Internet Sites
http://www.seattle.battelle.org/services/e&s/moresite.htm

Department of Ecology (WDOE) GreenLink - Auto Compliance Info
http://www.wa.gov.ecology http://www.ccar-greenlink.org

Environmental Information Center - Chemical Transportation EMERGENCIES
http://www.igc.apc.org/eic 1-800-424-9300

Environmental Protection Agency (EPA) Emergency Planning and Right-to-Know
http://www.epa/gov 1-800-535-0202

Global Recycling Network - EPA Region 10 Public Information Center
http://grn.com/grn/ 1-800-424-4372

Federal Information Center
1-800-688-9889

Hazardous Material Identification (MSDS)
1-800-631-1884

Lead Exposure (specific inquiries)
1-800-262-5323

National Response Center - oil/chemical spill reporting
1-800-424-8802

NIOSH - Occupational Safety and Health
1-800-356-4674

RCRA (EPA)
1-800-424-9346

Solid Waste Assistance Program
1-800-677-9424

Waste Treatment Technology and Vendors
1-800-245-4505

Wastewater Treatment/Water Quality
1-800-624-8301

HOT LINES - Washington State
Emergency Reporting
1-800-258-5990

Hazardous Substances
1-800-633-7585

IMEX Industrial Materials Exchange
1-888-879-4639

Recycling
1-800-732-9253

Water Quality & Wastewater Treatment (WDOE)
1-800-633-6193

Worker Right-to-Know
1-800-423-7233

SPILL REPORTING - 24 HOUR NUMBERS

National Response Center
1-800-424-8802

Regional Response Team
1-800-424-8802

Washington State Department of Ecology
Central Region: 1-509-575-2490
Eastern Region: 1-509-456-2926
Northwest Region: 1-425-649-7000
Southwest Region: 1-360-407-6300

Index

Fact Sheets that can be requested from your nearest Ecology regional office**:**

Emergency Spill Response in Washington State
Hazardous Waste Fact Sheets — do's and don'ts for handling different wastes and how to identify your wastes
Hazardous Waste Generator Checklist
Guide for Hazardous Waste Generators
Glossary of terms
Safe Handling of Empty Containers
Subject index with references and contacts for your hazardous waste questions
Services Directories/Resource Lists to help you find waste haulers, laboratories, recyclers, buyers for materials, and other services.
Solvent Substitute Options — Techniques for Dust Prevention and Suppression, Used Oil Disposal Prohibitions
RCRA ID/Generator Number — do you need a number and how to obtain one
Dangerous Waste Annual Reporting
Dangerous Waste Regulations

Other Publications:
Shoptalk - A free quarterly publication for hazardous waste generators including articles on local businesses, regulatory changes, surveys, ideas, information and more! Call (360) 407-6719 today to get on the mailing list.
Discussion Paper on Used Oil Requirements — includes used oil that is recycled and burned for energy recovery in a space heater.

For additional copies of this document, please contact:

Department of Ecology
Publications Distribution Center
P.O. Box 47600
Olympia, WA 98504-7600

Please include your street address for UPS delivery

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If you have special accommodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at (360) 407-6700 (voice) or (360) 407-6006 (TDD). Regional TDD numbers are:

CRO (TDD) (509) 454-7673
ERO (TDD) (509) 458-2055
NWRO (TDD) (425) 649-4259
SWRO (TDD) (360) 407-6306